Warning

- Daikin Industries, Ltd.'s products are manufactured for export to numerous countries throughout the world. Daikin Industries, Ltd. does not have control over which products are exported to and used in a particular country. Prior to purchase, please therefore confirm with your local authorized importer, distributor and/or retailer whether this product conforms to the applicable standards, and is suitable for use, in the region where the product will be used. This statement does not purport to exclude, restrict or modify the application of any local legislation.
- Read the User's Manual carefully before using this product. The User's Manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

If you have any enquiry, please contact your local importer, distributor and/or retailer.

JMI-0107

JQA-1452

Quality Endorsed Company

Daikin Australia Pty Limited (ISO 9001) QEC 23256 31 May 2006

About ISO 9001

ISO 9001 is a plant certification system defined by the International Organization for Standardization (ISO) relating to quality assurance. ISO 9001 certification covers quality assurance aspects related to the " design, development, manufacture, installation, and supplementary service" of products manufactured at

EC99J2044

Certified Environmental Management

Daikin Australia Pty Limited (ISO 14001) CEM20437 13 November 2006

About ISO 14001

ISO 14001 is the standard defined by the International Organization for Standardization (ISO) relating to environmental management systems. Our group has been acknowledged by an internationally accredited compliance organisation as having an appropriate programme of environmental protection procedures and activities to meet the

Dealer

DAIKIN INDUSTRIES, LTD.
Head Office:
Umeda Center Bldg., 2-4-12, Nakazaki-Nishi,
Kita-ku, Osaka, 530-8323 Japan

Tokyo Office:
JR Shinagawa East Bldg., 2-18-1, Konan,
Minato-ku, Tokyo, 108-0075 Japan

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PCAAU0805

Photocatalytic Air Purifier
flash streamer

Removal of
28 allergens

Removal of
19 adjuvants

Deodorising

Removal of
bacteria

2005
Award of
The Institute of Electrostatics Japan
Winner

MC707PVM

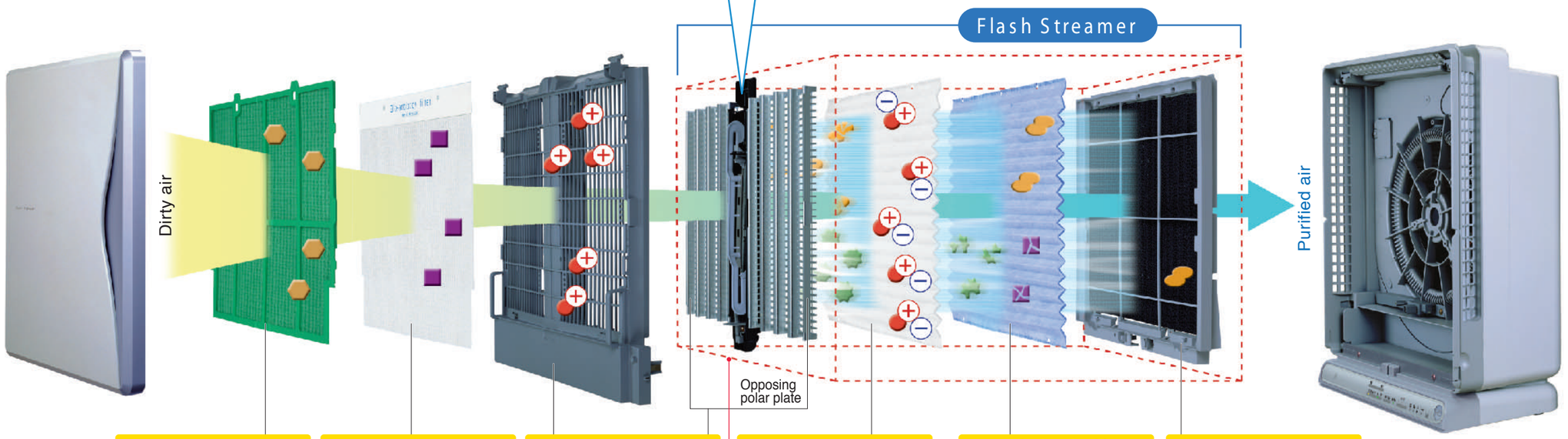
Powerful removal of allergens and adjvants with the amazing Flash Streamer!

❹ Flash Streamer unit

The highly effective streamer discharges a stream of high-speed electrons that enable powerful decomposition. Foul odours and adjuvants such as exhaust gas, diesel exhaust particles and VOCs are effectively removed from the air.

Airborne substances like these are broken down and removed.

- Adjuvants (diesel exhaust particles, exhaust gas, VOCs, formaldehyde, etc.)
- Allergens (mite, pollen, mould, etc.), cigarette smoke and micro size dust
- House dust and pet hair
- Bacteria, mould spores, and viruses
- Odours (cigarette, mould and pet odours, etc.)



1 Prefilter (with catechin)

Large dust particles and pet hairs are captured and the bacteria and mould spores attached to them are removed by the catechin component.*1

2 Bio-antibody filter

Airborne viruses are quickly adsorbed by the power of the bio-antibodies and then quickly removed.

3 Plasma ioniser

Dust and pollen are positively charged and then sent to the electrostatic filter.

6 Electrostatic dust collection filter (Front of pleated filter)

Positively charged dust and pollen are adsorbed by the negatively charged filter.

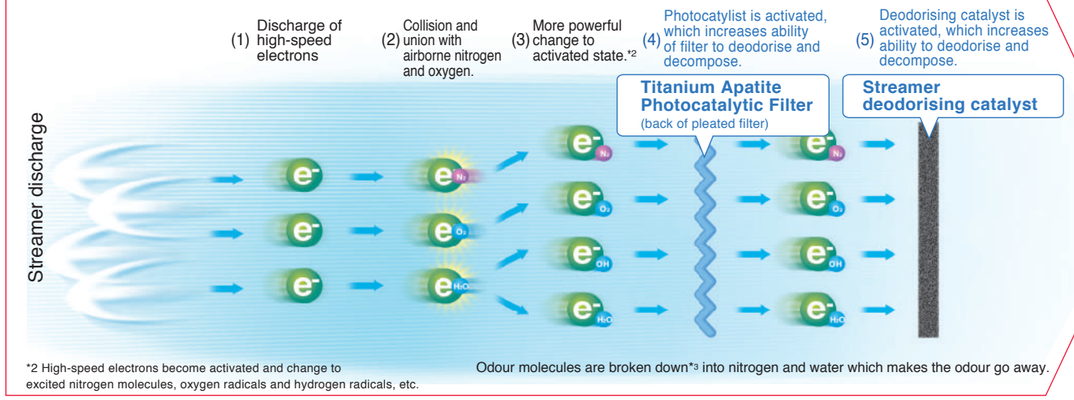
7 Titanium Apatite Photocatalytic Filter (Back of pleated filter)

Odours collected on the front side are broken down. Bacteria, mould spores and viruses are also adsorbed and thoroughly removed.

8 Streamer deodorising catalyst

Odours are powerfully removed by the synergistic effect of the Flash Streamer. This makes the air even cleaner.

❺ How the Flash Streamer works


(1) Discharge of high-speed electrons
(2) Collision and union with airborne nitrogen and oxygen.
(3) More powerful change to activated state.*2
(4) Photocatalyst is activated, which increases ability of filter to deodorise and decompose.
(5) Deodorising catalyst is activated, which increases ability to deodorise and decompose.
Titanium Apatite Photocatalytic Filter (back of pleated filter)
Streamer deodorising catalyst
Streamer discharge

*2 High-speed electrons become activated and change to excited nitrogen molecules, oxygen radicals and hydrogen radicals, etc.

Odour molecules are broken down*3 into nitrogen and water which makes the odour go away.

2005 Award of The Institute of Electrostatics Japan Winner

Awarded for development of home-use air purifier that uses direct current streamer discharge.

- Powerful removal of 28 allergens.
- Powerful removal also of 19 adjuvants. (diesel exhaust particles, exhaust gas, and VOCs, formaldehyde, etc.)
- Powerful decomposition of odours with Flash Streamer and photocatalyst.
- Removal of bacteria, mould spores, and even viruses.

With the Flash Streamer, decomposition by oxidation is

over 1000 times faster than glow discharge.

The Flash Streamer (streamer discharge) is a type of plasma discharger that is over 1,000 times faster at oxidation decomposition than the commonly used glow discharge method while using the same amount of electrical power.

* Flash Streamer operation will be accompanied by electro-discharge noise.

About the dust collection and deodorising capacity of air purifiers:

- All harmful substances in cigarette smoke (carbon monoxide, etc.) cannot be removed.
- Not all odour components that emanate continuously (building material odours and pet odours, etc.) can be removed.

*1 Evaluation method: antibacterial test. Testing organisation: Japan Food Research Laboratories. Test result certificate No. 203041907-003. *3 Acetaldehyde is deodorised by breaking down into water and carbon dioxide.

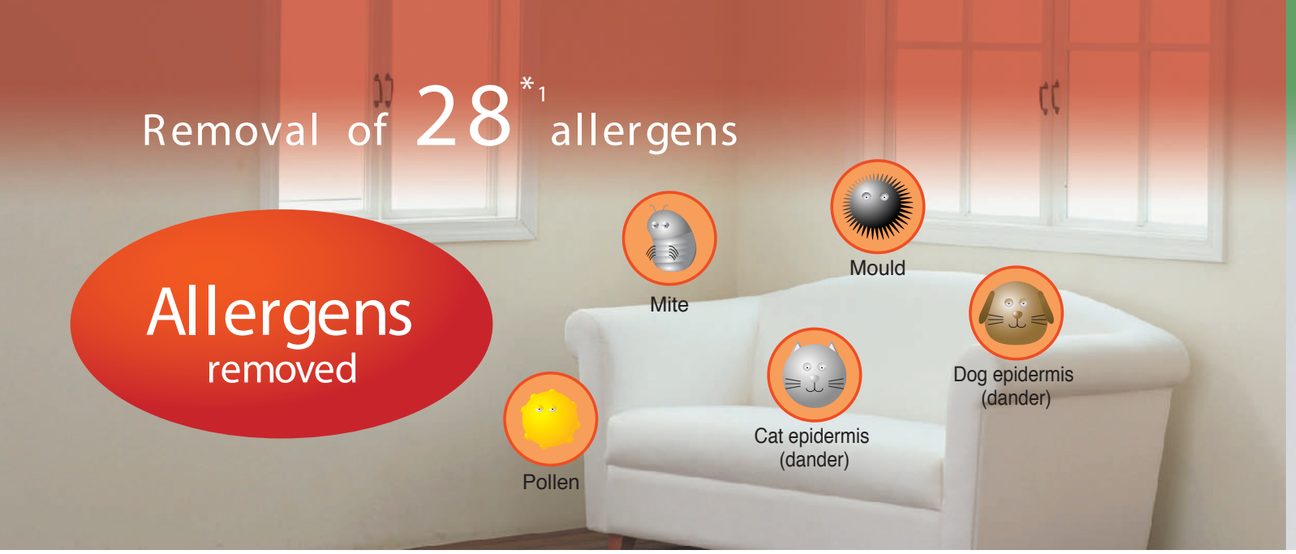
4 main merits of the Flash Streamer

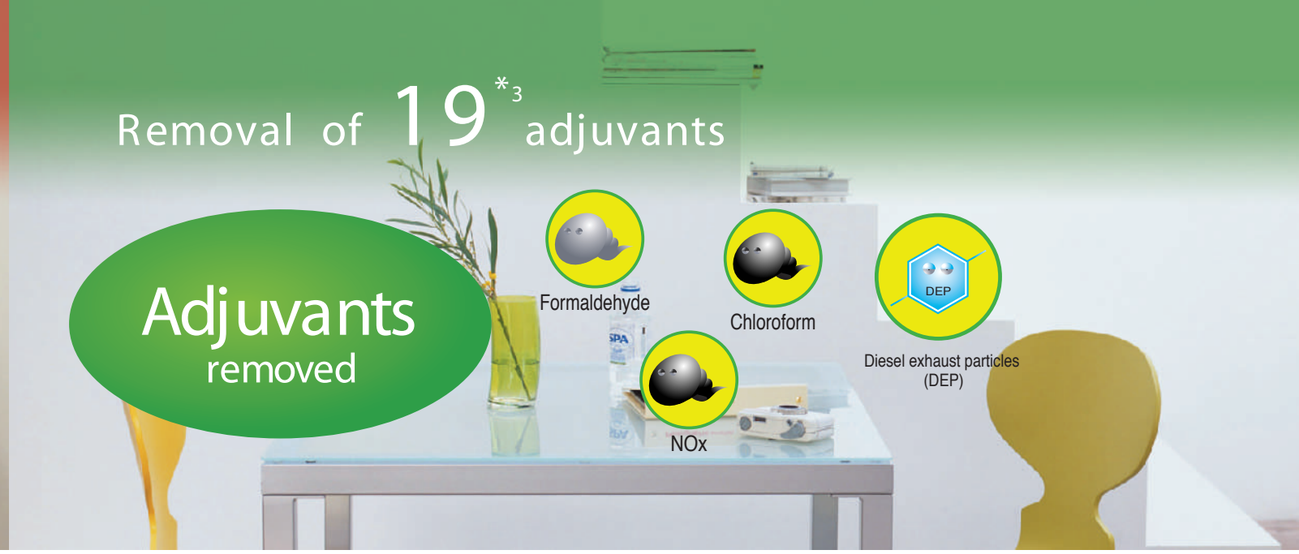
Removal of 28 allergens — Page 5

Removal of 19 adjvants — Page 6

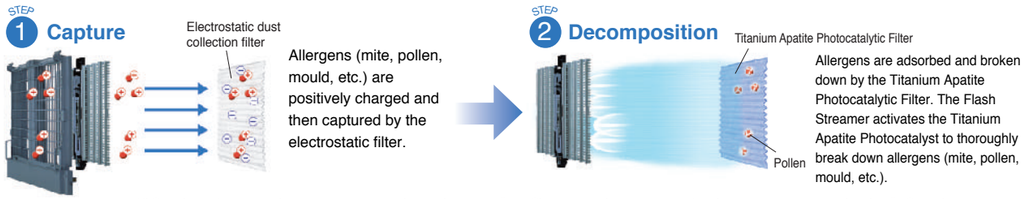
Deodorising — Page 7

Removal of bacteria — Page 8



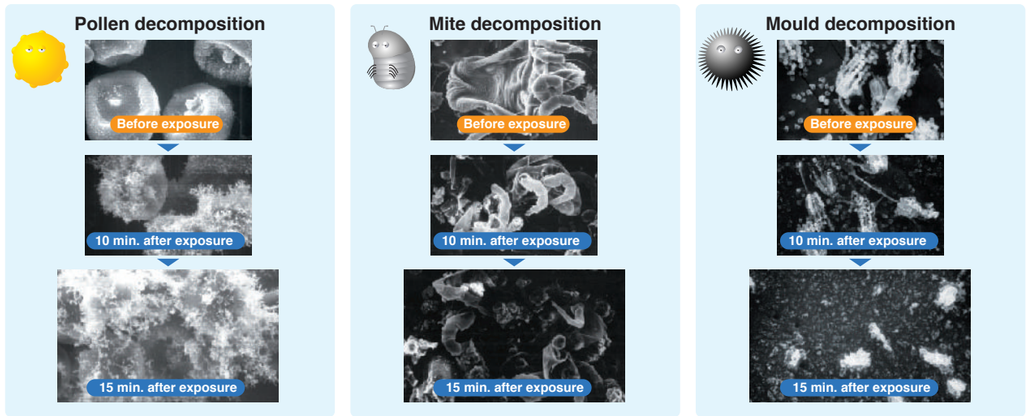


Removes over 99.6%*2 of allergens such as mite, pollen and mould.


STEP 1 Capture
Electrostatic dust collection filter
Allergens (mite, pollen, mould, etc.) are positively charged and then captured by the electrostatic filter.
STEP 2 Decomposition
Titanium Apatite Photocatalytic Filter
Allergens are adsorbed and broken down by the Titanium Apatite Photocatalytic Filter. The Flash Streamer activates the Titanium Apatite Photocatalyst to thoroughly break down allergens (mite, pollen, mould, etc.).
Pollen

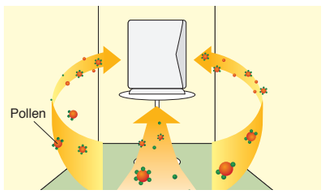
*2 Conditions of experiment: Allergens were irradiated for 4 hours by Flash Streamer and the breakdown of protein was verified using either the ELISA method, cataphoresis, or an electron microscope. (Joint research with Wakayama Medical University.)

Flash Streamer powerfully breaks down pollen, mite, and mould.



Photos were taken by an electron microscope after pollen and mites were put on the electrode of the Flash Streamer and then exposed by the Flash Streamer for 15 minutes.

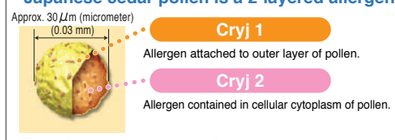
Room pollen caught by gentle air turbulence.



Pollen Mode

The falling speed of pollen is controlled by the airflow, which alternates between fast and slow. By creating this gentle turbulence in the room air, pollen is caught before it lands on the floor where it is difficult to retrieve.

Japanese cedar pollen is a 2-layered allergen


Approx. 30 μm (micrometer) (0.03 mm)
Cryj 1
Allergen attached to outer layer of pollen.
Cryj 2
Allergen contained in cellular cytoplasm of pollen.

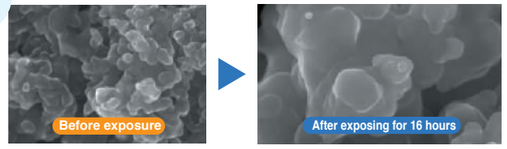
Even if Cryj 1 is broken down, the Cryj 2 concealed inside remains. The Flash Streamer powerfully breaks down even Cryj 2.

*1 Cedar pollen, alder pollen, birch pollen, Japanese cypress pollen, pencil cedar pollen, bald cypress pollen, mugwort pollen, orchard grass pollen, ragwood pollen, sweet vernal grass pollen, timothy grass pollen, house dust mite [dermatophagoides pteronyssinus] (droppings and dead mites), house dust mite [dermatophagoides farinae] (droppings and dead mites), American cockroach (droppings), German cockroach (droppings), flea (droppings), dog epidermis (dander), cat epidermis (dander), hamster epidermis (dander), sooty moulds, aspergillus, eurotium, cladosporium, fusarium, penicillium, and wheat flower.

Typical adjuvants and even diesel exhaust particles are thoroughly removed.

Adjuvants such as diesel exhaust particles, exhaust gas (NOx, formaldehyde, etc.) and VOCs (volatile organic compounds such as toluene and xylene) exist in our atmosphere. Adjuvants not only enter rooms through windows, but enter by clinging to our clothes. Once inside, they attach themselves to allergens such as pollen, mites, and mould. The Flash Streamer thoroughly removes not only the adjuvants, but also the heavy allergens, which consist of allergens with adjuvants attached to them.

Structure of diesel exhaust particles is destroyed at the nano level.



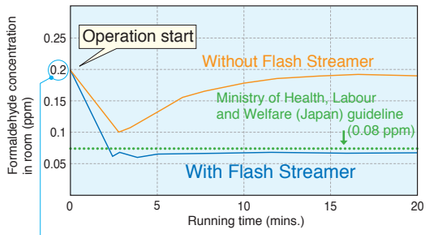
Photos were taken by an electron microscope after diesel exhaust particles were put on the pleated filter and exposed by the Flash Streamer for 16 hours.

Flash Streamer quickly removes persistent formaldehyde.

Formaldehyde, which continually emanates, is considered more difficult to remove than transitory pollutants such as cigarette smoke. The Flash Streamer is able to remove it.

●When concentration of 0.2 ppm is continually eminated

(Compliant with Ministry of Land, Infrastructure and Transport (Japan) guideline.*)
*Tentative WG guideline based on Ministry of Land, Infrastructure and Transport (Japan) sick house evaluation method.

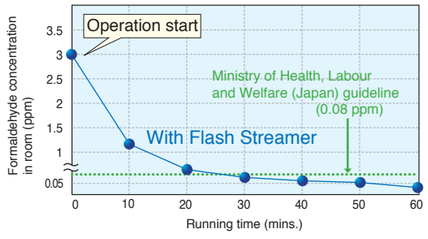


0.2 ppm = average of amount of formaldehyde released in newly built home and formaldehyde released from furniture, etc.

Test conditions: Airflow: 420 m^3/h.; Test room: approx. 9.9 m^2;
Test instrument: MC707.

●When initial concentration is 3 ppm

(Compliant with JEMA formaldehyde standard removal test method.)



Test conditions: Airflow: 420 m^3/h.; Test room: approx. 9.9 m^2;
Test instrument: MC707.

Formaldehyde Guideline

Based on an interim report, the investigative commission for the problem of indoor air contaminants at the Ministry of Health, Labour and Welfare (Japan) have formulated, as follows, a guideline for concentrations of chemical substances contained in indoor air.

Volatile organic compound	Indoor concentration guideline*	Reference notice
Formaldehyde	100 μg/m^3 (0.08ppm)	No. 1093

From "Concentration guideline for chemical substances in indoor air and standard measurement method" (June, 2000), an official notice from Ministry of Health, Labour and Welfare (Japan).
*Calculation of both units is at 25°C.

Recommended value of World Health Organisation (WHO) is also 0.08 ppm.

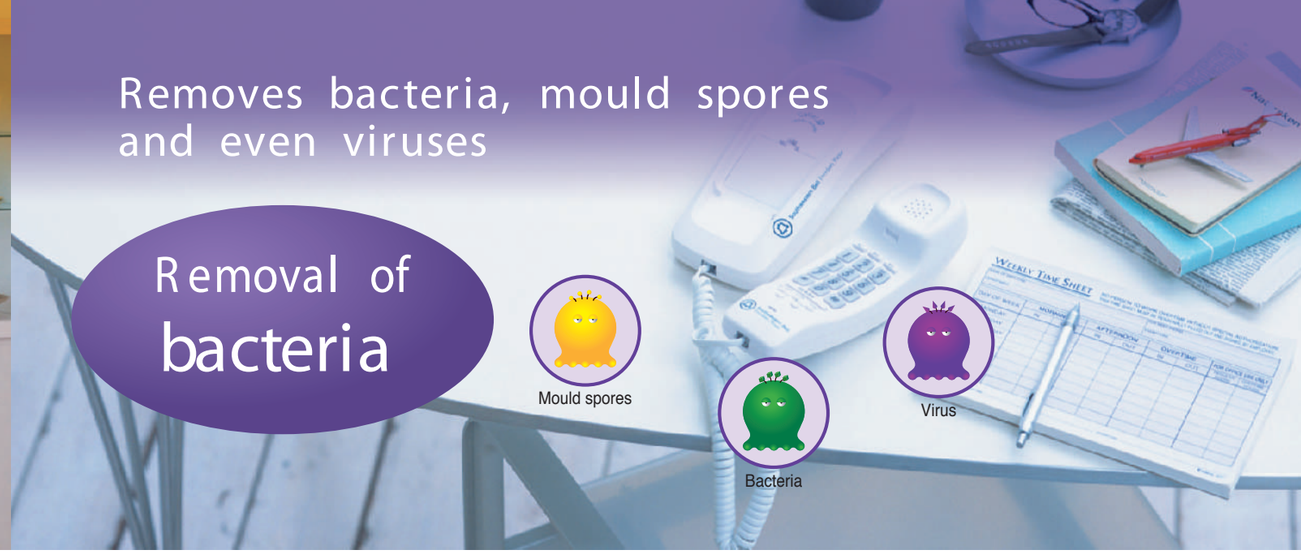
About adjuvant removal

The change in surface structure of diesel exhaust particles were verified with an electron microscope after irradiating them with the Flash Streamer.
Following that, the change in concentration before and after air purifier operation of gaseous adjuvants were verified using the damping or constant generation method.

About the dust collection and deodorising capacity of air purifiers:

- All harmful substances in cigarette smoke (carbon monoxide, etc.) cannot be removed.
- Not all odour components that emanate continuously (building material odours and pet odours, etc.) can be removed.

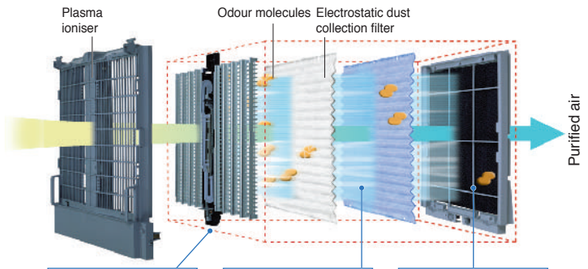
*3 Diesel exhaust particles (DEP), benzene, toluene, ethyl benzene, xylene, styrene, naphthalene, iso-butanol, trichloroethylene, NOx, ethyl acetate, hexane, nonanoic acid, trimethyl benzene, formaldehyde, tetrachloroethylene, dichloromethane, chloroform, and dichloroethane.



Titanium Apatite Photocatalyst!

Powerful deodorising by Flash Streamer and photocatalyst

Powerfully breaks down odours in 3 stages!



Flash Streamer

High-speed electrons quickly break down odour components in this space.

Flash Streamer × Titanium Apatite Photocatalytic Filter

Odour components adsorbed by the filter are powerfully broken down by the photocatalyst.

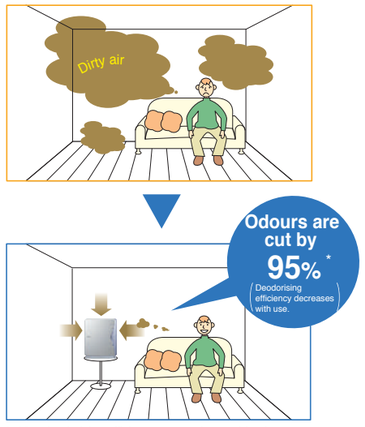
Flash Streamer × Streamer deodorising catalyst

Odour components get a further and final breaking down by the streamer deodorising catalyst.

The Flash Streamer further empowers the Titanium Apatite Photocatalytic Filter and streamer deodorising catalyst.

Quick deodorising

Quickly breaks down unpleasant odours



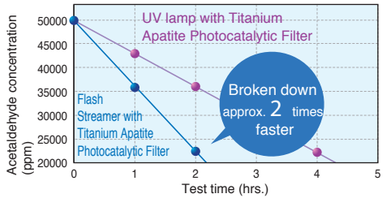
* 95% deodorising efficiency means the combined removal rate of ammonia, acetaldehyde and acetic acid after burning five cigarettes in a 1 m^3 airtight container and running the air purifier at rated airflow for one minute.

Titanium Apatite Photocatalyst!

Flash Streamer with photocatalyst is approx. 2 times more powerful than UV with photocatalyst

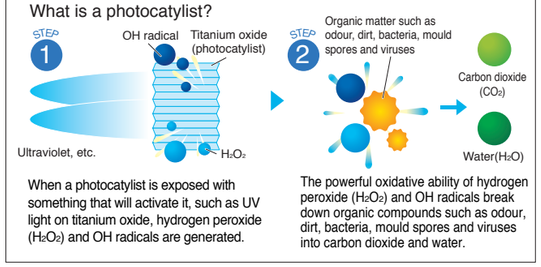
Photocatylist is approx. 2 times more powerful with Flash Streamer than with UV light.

• Decomposition of acetaldehyde



Test conditions: Acetaldehyde gas was introduced into a 9 liter acrylic desiccator with Titanium Apatite Photocatalyst test powder added and the change in concentration was measured.

What is a photocatalyst?



When a photocatalyst is exposed with something that will activate it, such as UV light on titanium oxide, hydrogen peroxide (H_2O_2) and OH radicals are generated.

The powerful oxidative ability of hydrogen peroxide (H_2O_2) and OH radicals break down organic compounds such as odour, dirt, bacteria, mould spores and viruses into carbon dioxide and water.

About the dust collection and deodorising capacity of air purifiers:	•All harmful substances in cigarette smoke (carbon monoxide, etc.) cannot be removed. •Not all odour components that emanate continuously (building material odours and pet odours, etc.) can be removed.

Titanium Apatite Photocatalyst!

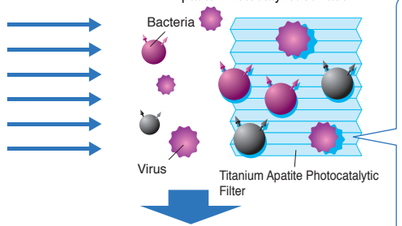
Flash Streamer with Titanium Apatite Photocatalyst removes 99.99%*1 of bacteria and mould spores.

Uses Titanium Apatite Photocatalytic Filter.

The Titanium Apatite Photocatalytic filter excels in adsorbing bacteria and mould spores. After being thoroughly adsorbed by the filter they are removed by the Flash Streamer.

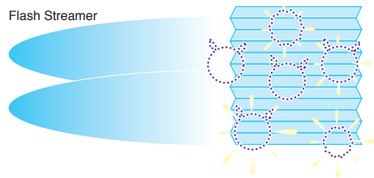
STEP 1 Adsorption

Bacteria, mould spores and viruses are thoroughly adsorbed on the entire Titanium Apatite Photocatalyst surface!

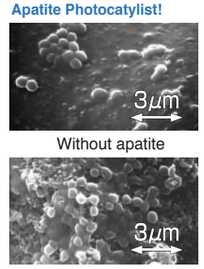


STEP 2 Decomposition

The Flash Streamer activates the photocatalyst and breaks down bacteria and viruses!

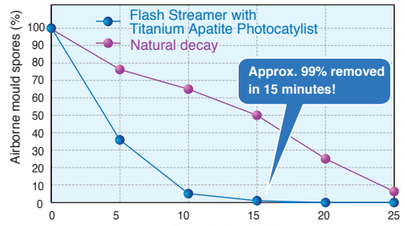


Better bacteria adsorption with Titanium Apatite Photocatalyst!



1 μm (micrometer) equals one millionth of a meter.
Photo: Daikin Air-conditioning R&D Laboratory, Ltd.
Conditions of experiment: Weak bacterium solution adsorbed by filter, which was dried after three cleanings and then observed with electron microscope.

Quickly remove even indoor mould spores!



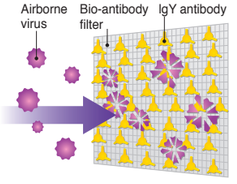
Room area: approx. 13 m^2; Method of experiment: Air purifier placed in experiment room. Mould spores dispersed in room while air is agitated. Number of airborne mould spores measured over time. Measurement method: Air sampler method; Test result certificate number 205090528-002; Testing organisation: Japan Food Research Laboratories

*1 Effectiveness shown for bacteria and mould spores collected on Titanium Apatite Photocatalytic Filter. Method of measurement: antibacterial test. Testing organisation: Japan Food Research Laboratories. Test Result Certificate No. 203120769-004.

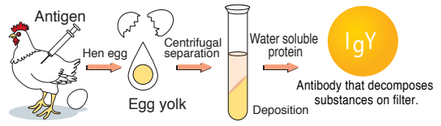
Bio-antibody filter removes viruses in about 1 minute.*2

It is important to eliminate viruses as soon as possible after they collect on the filter. The Bio-antibody filter can quickly remove viruses in about 1 minute.

The Bio-antibody filter is usable for one year after opening. In following years please purchase new filters separately. Operation will not be adversely affected if a Bio-antibody filter is not used. Effective for 3 years from date of manufacture.



IgY antibody: born of the latest in bio-technology



Proven through joint research with Waseda University and the Ministry of Health, Labour and Welfare, National Institute of Infectious Diseases (Japan).

*2 Effectiveness shown for substances collected on Bio-antibody Filter. Method of experiment: antiviral experiment (After using a filter to collect viruses that were atomised by a nebulizer, they were evaluated for contagiousness.)

Stylish design matches your interior

Home

Living room

Bedroom

Office

Restaurant

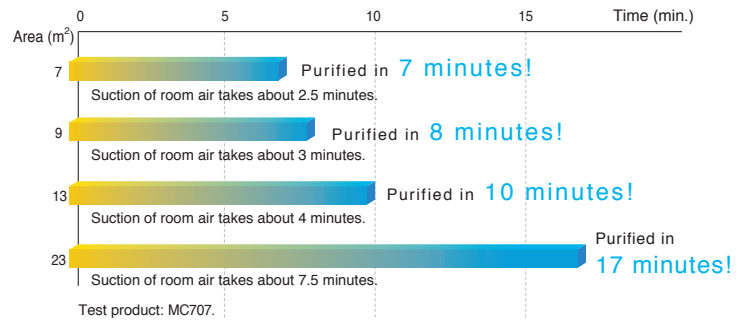
Large airflow

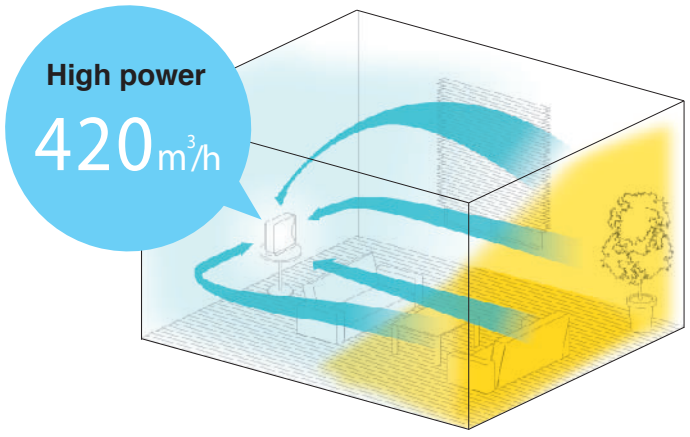
420 m^3/h.
high-power suction!

Applicable room size Up to 48m^2 MAX.

Powerful 4-directional suction is used to reach every corner of the room. Odours, dust, bacteria and formaldehyde are relentlessly sucked in from above, left, right, and front.

• Guideline purification times





About the dust collection and deodorising capacity of air purifiers:

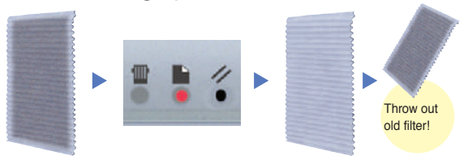
•All harmful substance
•Not all odour compon
odours, etc.) can be

7 year pleated filter

Replaced each year for cleanliness and worry-free operation.

Comes with 7 pleated filters, a 7 year supply.

How to change pleated filter



1 Filter gets dirty 2 Filter replacement indicator illuminates. 3 Set new filter.

Economical: no need to buy filters for 7 years!

Operation is economical since the air purifier comes with 7 filters. You won't need to buy filters for 7 years. Each year you can replace with a clean new filter.

• Calculation of filter life is based on 10 cigarettes per day being smoked in the room. (Results based on testing carried out in accordance with Japan Electrical Manufacturers Association JEM1467 standard.) The unit is unable to remove all harmful substances such as carbon monoxide found in cigarette smoke. Filter replacement of once per year is given as a guide. Replacement time will differ depending on how the unit is used and where it is located. The replacement period will be shorter if the unit is used in a location where the air is very dirty.

Easy filter storage!

Unused filters can be stowed neatly inside the unit.

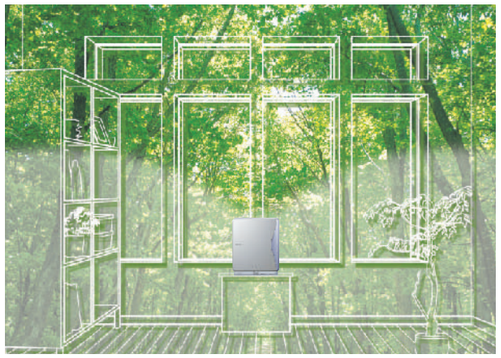
Cleaning beneath the plasma ioniser

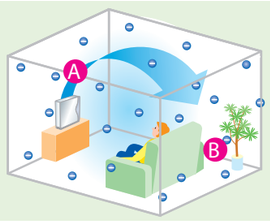
1 When cleaning sign lights 2 Remove dust and set aside in water

To maintain performance, bottom of plasma ioniser should be maintained periodically.

Negative ions

In Negative Ion mode your room is filled with freshened air.





Turning on the switch is all it takes to generate negative ions. The large airflow fills the entire room, corner to corner, with freshened air.

A	One meter from outlet vent Approx. 300,000 per cc
B	Corners of room (approx. 14 m²) Approx. 10,000 per cc

Test conditions: Turbo mode used in an approx. 14 m^2 room at 25°C and 60% RH. (Conditions stipulated by Japan Electrical Manufacturers Association.)

Negative ions

Negative ions have a neutralising and purifying effect against substances that they cling to such as house dust, which holds positive ions and surrounds us in our daily lives.

Picture is for illustrative purposes only.

Amounts of negative ions in nature

Forests	Approx. 2,500 per cc
Waterfalls	Approx. 10,000 to 18,000 per cc

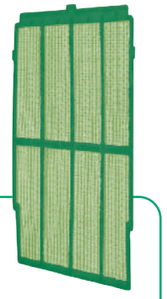
Designed for easy use

Easy wipe clean Flat panel

Simply do a quick single wipe with a moist cloth if it gets dirty. This design makes it easy to keep clean.

Hand-washable catechin prefilter

Remove, vacuum, and then just wash with water.



Catechin

Catechin, a bitter-tasting component found in plants, is a type of polyphenol. Found in abundance in tea, it possesses properties that enable it to remove bacteria and viruses. It is used in clothing such as underwear and in products such as masks and bedding.

Easy-to-carry handle

Allowing easy lifting with a single hand, it is great for moving the air purifier between rooms.

Remote controller storage space

The remote controller stores neatly in the top of the unit. You'll never have to look for it again.

Control the numerous features with the easy-to-use remote controller.

Anti-tamper lock

Set the antitamper lock with the remote controller to prevent small children from mishandling the air purifier.

Automatic operation

Airflow is adjusted to the level of dirt in the air.When the air is cleaner, energy-saving mode cuts in.This avoids wasted use of electricity.Still greater energy-efficiency from minimizing stand-by power.

TURBO Mode

This convenient mode provides high-power operation. Use it when you first come home or when you have unexpected guests.

Off timer

The remote controller can be set to turn off the unit after 1, 2 or 4 hours.

4 steps fan speed

Fan speed can be adjusted in four steps from LL to H mode.

Pollen Mode

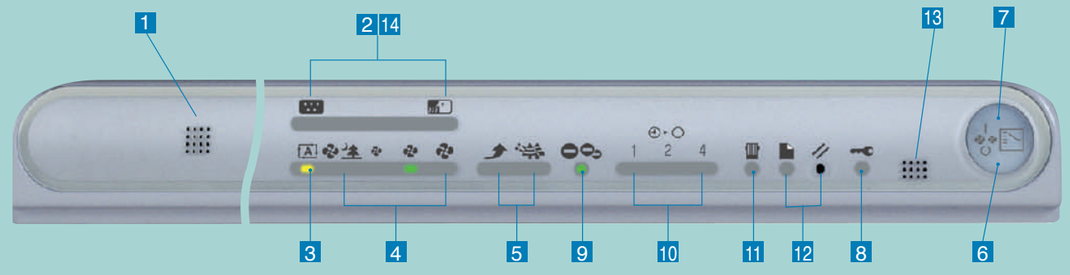
By creating a gentle turbulence in the room air, pollen is caught before it lands on the floor.

Negative Ion Mode

Turning on the "RELAX" switch is all it takes to generate negative ions. The large airflow fills the entire room, corner to corner, with freshened air.

Display adjustment

The brightness of lamps on the indicator panel can be adjusted to one of three levels.



1 Air intake for dust sensor
Air enters here so that the dust sensor can detect how much dirt there is.

2 Dust sensor lamps
The amount of dust detected in the air is indicated by these lamps.

3 Auto airflow lamp (yellow)
Illuminates during automatic operation.
One of the airflow lamps will also illuminate.

4 Airflow lamps (green)
The lamp for the airflow setting illuminates.

5 Turbo and Pollen mode lamps (green)

6 Receiver
This receives signals from the remote controller.

7 Mode switch and stop button
The operation mode switches each time this button is pressed.

8 Antitamper lock lamp (orange)

9 Negative ion lamp (green)
Illuminates during Negative Ion mode.

10 Off timer setting lamp (yellow)
The lamp for the Off time setting illuminates.
- After setting, the lamp that indicates the remaining time will illuminate as time passes.

11 Clean indicator (red)
This tells you by flashing when it is time to clean the plasma ioniser.

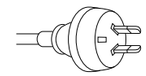
12 Filter replacement indicator (red) and reset switch
Illuminates when it is time to replace the pleated photocatylist filter. If more time passes it will start flashing.
- Please press the Reset switch after replacing the filter.

13 Air intake for odour sensor
Air enters here so that the dust sensor can detect how much odour there is.

14 Odour sensor lamps
The amount of odour detected in the air is indicated by these lamps.

Photocatalytic Air Purifier

SPECIFICATIONS

Model		MC707PVM				
Regulation		C-tick Marking				
Power supply		1ø 220-240 V 50 Hz				
Type		Photocatalytic air purifier				
Color		Silver				
Dimensions (H x W x D)	mm	533 x 425 x 213				
Weight	kg	8.7				
Applicable room area*1	m^2	48				
Mode		HH	H	M	L	LL
Running current	A	0.48	0.22	0.14	0.10	0.08
Rated power consumption	W	55	23	14	10	8
Operation sound *2	dB(A)	47	38	31	24	16
Airflow rate	m^3/h	420	285	180	120	60
Prefilter		Polypropylen net with catechin				
Dust collecting method		Plasma ioniser (electrostatic dust collection) + Electrostatic dust collection filter				
Deodorising method		Flash streamer + Titanium apatite photocatalytic filter +Deodorising catalyst				
Bacteria filtering method		Bio-antibody filter + Flash streamer + Titanium apatite photocatalytic filter				
Safety devices		Safety switch (Operation stops when the front panel open)				
Power cord	m	2.0				
Plug shape		 O-TYPE				
Standard accessories		Operation manual, wireless remote controller, Titanium apatite photocatalytic pleated filter, Bio-antibody filter				

*1 Operation sound levels are the average of values measured at 1m away from the front, left, right, and top of the unit. (This equal to the in an anechoic camber)

OPTIONS

Model		
	Titanium Apatite Photocatalytic pleated filter for replacement	KAC972A4E
	Bio-antibody filters for replacement	KAF972A4E